

## CLAIMS

[30030650 US]

1. A tester for testing communication in a network that carries data frames between communications ports having respective addresses, each frame containing an indication of the address of the source of the frame, the address of the intended destination of the frame, and other data, comprising:
  - 5 at least one communications port;
  - a receiver for receiving a data frame arriving at the communications port;
  - circuitry for
  - 10 - recognising test data frames according to at least one predetermined criterion and extracting predetermined items from each test data frame, including the source and destination addresses, and
  - generating a new test data frame incorporating the predetermined items, with the source and destination addresses exchanged, and incorporating additional content of predetermined value; and
  - 15 a transmitter for transmitting the new data frame with the exchanged addresses into the network.
2. The tester of claim 1, wherein the predetermined criterion comprises presence in a frame of payload data in predetermined format including a valid CRC code.
3. A method of testing communication in a network that carries data frames between communications ports having respective addresses, each frame containing an indication of the address of the source of the frame, the address of the intended destination of the frame, and other data, comprising the steps of:
  - 25 providing at least one communications port;
  - receiving a data frame arriving at the communications port;
  - recognising test data frames according to at least one predetermined criterion and extracting predetermined items from each test data frame, including the source and destination addresses;
  - 30 generating a new test data frame incorporating the predetermined items, with the source and destination addresses exchanged, and incorporating additional content of predetermined value; and
  - transmitting the new data frame with the exchanged addresses into the network.
- 35 4. The method of claim 3, wherein the predetermined criterion comprises presence in a frame of payload data in predetermined format including a valid CRC code.